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GE's "Ecomagination" Event

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[*Introduction*]

Thank you for inviting me to speak this afternoon. I am very pleased to participate in what is truly a watershed event: the launching of GE's new "Ecomagination" platform.

This initiative provides the promise and the opportunity for applying technology and market-based approaches to solving environmental problems, especially for energy and water, which are inextricably linked. It also provides the energy and activism needed to focus on environmental challenges across the globe.

[*Drinking water: pathogen controls*]

Earth is the water planet. Water covers 70% of its surface and 100% of its future. Yet we are confronted with the paradox of water being both the source of life and also a major conduit for disease. Around the world, some 6,000 people, a majority being children, die every day from water-borne diseases. EPA and its partners are committed to reducing the toll from water-borne pathogens and other contaminants in our drinking water.

Technology is one of the keys to safeguarding our water quality. EPA will be issuing several new regulations that combine appropriate technologies and management practices to accelerate progress toward cleaner and safer water: through a Ground Water Rule to reduce the threat of illness by monitoring and controlling pathogens in groundwater; through a Cryptosporidium Rule to prevent outbreaks of the life-threatening cryptosporidium by enhanced surface water

treatment; through a Disinfection By-Products Rule to decrease potential human health risks from water treatment-related contaminants; and through a Drinking Water Lead Reduction Plan to improve regulatory and non-regulatory protections from lead in drinking water - - for children and families at homes, schools, and day-care facilities.

Clearly the drinking water business is an increasingly high-tech enterprise, especially as new rules and new monitoring capabilities allow us to detect and treat against a broader array of contaminants. But there is also a growing need for lower-tech devices for treating water on-site at a home or business, or for a small community unable to afford to treat all its water to drinking water standards.

This need is fairly substantial across the US, and it is truly essential in developing countries. The private sector is key to development of needed technologies, especially eco-friendly technologies, to promote drinking water monitoring and treatment.

[*Sustainable Infrastructure - Four Pillars*]

In addition to technology, the other key for ensuring water quality is a sustainable infrastructure to manage and treat our water supplies and our wastewater. EPA and others have documented the large potential funding gap that may result if current levels of spending do not increase to address an aging water infrastructure network - - for both drinking water and waste water.

The problem is huge. EPA's 2002 "Gap Analysis Report" showed that, if investment doesn't increase, the funding gap for the next 20 years could be as much as $122 billion for Clean Water capital costs and $102 billion for Drinking Water capital costs. Even if revenue grows by 3% per year above inflation, the gaps would be $21 billion for Clean Water and $45 billion for DW capital.

But obviously the federal government cannot do the job alone, and funding isn't the only answer. We're encouraging sustainable practices for managing water infrastructure: our four pillars of sustainable infrastructure.

First, we want to encourage better utility management through practices such as environmental management systems, asset management and public/private partnerships. When managers better understand the condition of their assets, they are able to make more informed decisions about where and when to replace or rehabilitate infrastructure.

At EPA, we are learning from leading utilities about ways to establish effective Environmental Management Systems (EMSs); and we are actively promoting greater use of EMS approaches among other water and wastewater utilities.

[*Full-cost pricing*]

We also are promoting full-cost pricing for water services**,** i.e., pricing that recovers all of the costs of building, operating, and maintaining a system is absolutely essential to achieving sustainability - - and it also helps to foster water conservation.

In encouraging full-cost pricing, we understand the political challenge to adopt it. And we must be aware of how to develop programs that achieve the goal without disproportionately impacting segments of society that are less able to pay (perhaps through "lifeline rates" for the poor).

The philosopher Adam Smith noted the paradox of diamonds and water. He asked why water, which is essential for life, could be so inexpensive, while diamonds, which are non-essential decoration, are so expensive. It might be timely to reassess the value we place on providing adequate supplies of clean and safe water. We need to better educate rate-payers about the value of water.

[*Water efficiency and conservation*]

Another pillar of sustainable infrastructure - - and one that is especially pertinent to today's event - - is water efficiency and conservation. I am truly enthused about the potential for "ecomagination" to foster water conservation.

Although EPA's statutory authorities focus more on water quality than water quantity, the two issues are inter-connected, especially during periods of drought or high demand - - for example, to meet permit limits or water quality standards, or to ensure in-stream flows for healthy ecosystems. The US General Accounting Office has surveyed states and reported that as many as 36 states will have water shortages within 10 years - - not due to drought but to increased withdrawals.

Water efficiency is one area where technology can play a large role. Within EPA's Office of Water, we are looking into ways we can complement and build on the EnergyStar program to address water efficiency. We also are beginning a partnership with the Irrigation Association to look at urban landscape irrigation. Through non-regulatory approaches, we hope to promote the development and adoption of more efficient irrigation devices and systems.

[Water reuse]

Last fall we issued *Guidelines on Water Reuse*, a substantial document containing information, data, case studies, and links to other sources of information on this rapidly growing practice. Water reclamation and reuse help conserve our limited high-quality freshwater supplies.

[Desalination]

We could include desalination under the umbrella of "water reuse", as a process for ensuring new sources of water supply - - whether from ocean waters or brackish groundwater.

GE probably knows as much as anyone about desalination. But from my perspective, if technologies can drive down the cost of desalination at the same time that utilities pursue full-cost pricing, then desalination may finally be a viable option in many more places.

[*Watershed approach*]

To promote sustainable infrastructure, we also want to ensure decision-making within the context of the watershed In taking a watershed approach to addressing water issues, we have the opportunity to address complex water quality and water supply problems through more comprehensive solutions.

Through a watershed approach, we can and should look at: Integrated water resource management to help balance water quality vs. water quantity concerns; *soft-path technologies* that may prove to be less costly and more practical in addressing wet weather issues; *and source water protection* efforts that may help communities avoid treatment cost increases by preventing pollution at the source, before contaminants enter the water supply.

Partnerships are essential under the watershed approach. We must support stronger partnerships among federal and state agencies, municipalities, industry, non-governmental organizations, and citizens.

Building stronger partnerships just make sense. By bringing diverse parties to the table, we can identify more creative solutions to the problems facing us. Whether through innovations or a more basic watershed approach, stakeholders at the local level can address the inter-connections between water quality, water supply, and the economic vitality and quality of life in our communities.

[*Closing*]

I salute GE, and others in the private sector, who undertake ventures and investments, such as “ecomagination”, that will produce innovative solutions to water quality and quantity problems through environmentally friendly products and services.

Indeed, that is the core challenge for the private sector: to use your knowledge, ingenuity and imagination to develop “green” products and services, and to market them effectively - - - honestly but effectively.

I encourage all of us to “think green” as we develop and use products, and welcome with open arms the launch of GE’s new “ecomagination” initiative.

Thank you.